
XXI. *Some Account of a Collection of Arctic Plants formed by Edward Sabine, Esq., F.R.S. and L.S., Captain in the Royal Artillery, during a Voyage in the Polar Seas in the Year 1823. By William Jackson Hooker, LL.D. F.R.S. L.S. and H.S. Communicated by the Council of the Horticultural Society of London.*

Read April 6, 1824.

THE scientific engagements of Captain Sabine in his late voyage to the Polar Seas, were such as to occupy his time so extensively, that it was scarcely to be expected that other objects could have been attended to : but, ever zealous and active, the departments of zoology and botany are indebted to his exertion and industry for many interesting additions made and collected in the countries which he visited during the last summer.

Captain Sabine embarked on board His Majesty's ship *Griper*, commanded by Captain Clavering, in May 1823, for the purpose of carrying on a series of observations on the pendulum in the high latitudes of the northern hemisphere. He first visited Hammerfest, situated near to the north cape of Norway ; from thence he went to Spitzbergen ; and afterwards proceeded to the eastern side of Greenland, the coasts of which country were explored during his stay, from the 72d to between the 75th and 76th degrees of north latitude.

The specimens of plants collected by Captain Sabine at the above three stations, were presented by him on his return to the Horticultural Society of London, in whose library they are deposited,

posited, after having been examined by Dr. Hooker, Professor of Botany at Glasgow, whose interesting account of them is, by the order of the Council of the Society, now presented to the Linnean Society.

PLANTS FROM THE EAST COAST OF WEST
GREENLAND.

CL. I. DICOTYLEDONES.

RANUNCULACEÆ.

1. RANUNCULUS.

1. *R. nivalis.*

Inhabits the cold northern parts of Europe, Asia and America. It appears to have been first discovered in Spitzbergen by Martins, where it affects the sea-coast, as it also does the shores of Arctic America (*Rich.*). It was among the plants found in Melville Island, and there are numerous specimens of it, gathered in the various places visited by Captain Parry in his late voyage. In Iceland it inhabits the high mountains of the interior; as it does also in Lapland, where Wahlenberg tells us it is found to occur rarely on maritime alps at the North Cape. On the Altaic Alps of Siberia (*Laxmann*).

The form and size of the leaves, and the number of their lobes, are equally variable in these as in Captain Parry's specimens, and include the variety which has been called *sulphureus*.

2. *R. auricomus.*

Found in various parts of Europe, extending as far south as Greece. Gmelin gives it as an inhabitant of western Siberia,
Thunberg

Thunberg of Japan, and Pursh of Pennsylvania. In the north of Europe it is found in Nordland (*Wahlenberg*); and I have reason to think, that the *R. affinis* of Brown and Hooker (in Parry's 1st and 2d Voyages) will prove but to be slight varieties of this plant.

Since only one specimen of *R. auricomus* exists in Captain Sabine's collection, it is probably rare in Greenland. In the temperate parts of Europe it inhabits wooded places.

3. *R. glacialis*.

A native of high mountains, both in the north and south of Europe; of the Pyrenees, Switzerland, Hungary and Austria. Not found in Britain. It occurs on the Lapland Alps, but not on those in the neighbourhood of the sea, nor below the higher summits of the mountains. Captain Scoresby gathered it in East Greenland (it is incorrectly called *R. nivalis* by Hooker in Scoresby's East Coast of West Greenland); and this is probably the extent of its western range; for it was not seen by Dr. Richardson in Arctic America, nor was it found in Captain Parry's or Captain Ross's expeditions, except it be the plant that is mentioned by Mr. Brown as "*Ranunculus sulphureus forte, vel glacialis species e fragmentis non determinanda.*" *Br. in Ross's Voy.*

PAPAVERACEÆ.

2. PAPAVER.

4. *P. nudicaule*.

Confined to the northern and principally to the alpine regions of Europe, Asia and America. Upon the tops of the central range of mountains in Norway, called the Dover Chain, as stated by Professor C. Schmidt in De Candolle. In Eastern Siberia;

Siberia ; the Altaic mountains, Dahuria, Unalaschka, Labrador. On the sea-shore of Arctic America (*Richardson*) ; and upon adjacent islands not uncommon.

CRUCIFERÆ.

3. DRABA.

5. *D. alpina*.

There are three varieties of this plant which deserve notice, although differing principally in their size and degree of pubescence.

1. *major* ; glabriuscula, foliis biuncialibus (siccitate reticulatis) marginibus hic illic evidentissime dentatis.

A large and very beautiful state of *D. alpina*, with very few hairs on any part of the plant : its *scape* more than 3 inches high, and, as well as the pedicels, quite glabrous. *Calyx* very slightly hairy. *Corymbs* almost an inch in diameter, of a deep bright yellow.

2. *intermedia* ; pilosa, foliis pollicaribus (nec reticulatis) integris vel rarissime obsoletissime dentatis.

Marginal hairs of the leaves long and simple ; those of the disc, as well as of the scape, much branched : hairs few on the calyx. *Corymbs* smaller than those of the first variety, and the flowers generally paler.

3. *nana* ; valde pilosa, nana.

Leaves scarcely half an inch high ; scape about an inch, and, as well as the calyx, very hairy.

Inhabits the mountains of Lapland and Norway, and the arctic regions of America. West coast of East Greenland (*Greville*).

With regard to pubescence, this species appears as liable to variation as the following one is known to be.

6. *D. hirta*.

A very few specimens of this plant exist in the collection, and these belong to what I have considered as a fourth variety of *D. hirta* in my account of the plants of Captain Parry's second Voyage: as "1—3 pollicaris, foliis integerrimis, scapo gracili aphylo."

Some or other of the numerous varieties of this species are found in the alpine countries of the north of Europe and America; and if the plant be, as I suspect, the *R. nivalis* of De Candolle, it is also a native of the mountains of Switzerland, Savoy and Dauphiny.

7. *D. muricella*.

This quite agrees with the species so denominated by Wahlenberg, in the nature of its pubescence: but two out of five stalks are furnished with a leaf; whereas Wahlenberg defines the *D. muricella* as having a "scapus semper nudus." I am here more confirmed in an opinion, that I have elsewhere expressed, that this is but a densely pubescent variety of *D. hirta*. The germen and silicules are stellato-pubescent.

Whether a variety or a species, this plant exists on the alps of Switzerland, as well as those of Lapland, Norway and Siberia. Dr. Richardson found it in Arctic America; Mr. Jameson on the west coast of Greenland, and Captain Parry in the Strait of the Fury and Hecla.

De Candolle has placed the *D. muricella* in his division of the genus *Chrysodraba*; whereas the inflorescence is constantly white. Perhaps the *D. tomentosa* of that author might safely be referred hither.

8. *D. in-*

8. *D. incana*?

The few specimens of this plant are destitute of root-leaves ; but from the nature of those upon the stem, as well as of the silicules, I have reason to believe it the true *D. incana* ; the *contorta* of Ehrhart and De Candolle. If so, it is likewise an inhabitant of the alps in the south of Europe, as the Pyrenees and Caucasus ; as well as of England and Scotland, Unalaschka, Greenland and Labrador.

It does not appear, however, to have been met with in Arctic America, or on the adjacent islands.

4. COCHLEARIA.

9. *C. fenestrata*?

Not in perfect fruit ; but probably the same as the arctic *Cochlearia*, described by Mr. Brown and myself as found by Captains Ross and Parry. If it be really a distinct species, our present knowledge of it is confined to the countries visited by those gentlemen ; in which probably may be included Greenland and Spitzbergen.

CARYOPHYLLÆ.

5. SILENE.

10. *S. acaulis*.

Frequent on all the alps of Europe ; in Iceland and Greenland. On the coast of Labrador, and shores of the Arctic Sea (*Richardson*). In Baffin's Bay (not in Melville Island) ; on Upper Savage Island, and Duckett Cove (*Captain Parry*).

6. LYCHNIS.

11. *L. apetala*.

Var. glanduloso-pubescens.

Most of the specimens are deeply tinged with purple, especially on the calyx and stem; and the latter part especially is thickly covered with a dense pubescence, the hairs jointed, crisped, and frequently terminated with a gland. The more common state of the plant is slightly pubescent, having the leaves almost wholly glabrous. The capsule is rather longer than the calyx, and opens with five obtuse teeth.

Native of Lapland, Norway and Siberia, beyond the Aldan river, and near the rivers Biela and Jana; it grows also in Arctic America (*Richardson*); on Melville Island and Spitzbergen (*Captain Sabine*). I am not aware that it has been found before in Greenland; though, if we may judge from the number of specimens brought thence, it appears to be not uncommon there. Many of them are from Pendulum Island.

12. *L. dioica*.

Var. nana, caule subnullo, foliis lanceolatis margine tomentoso-ciliatis.

A most beautiful variety, with the flowers nearly as large as in the common appearance of the species, nestling among the radical leaves, which are from an inch and a half to two inches long, scarcely pubescent on the disc, but ciliated with soft hairs at the margin.

This variety does not appear to be noticed by any author that I am acquainted with. It is the purple-flowered state of the plant; the more common appearance of which is plentiful throughout Europe in moist and shady places. It is found also on the west coast of Greenland. In Lapland, in Carpathia, and in Scotland, it ascends to a considerable height up the mountains; and in the latter country, near the summit of Ben Lawers, I have met with a dwarf variety, somewhat

somewhat approaching the present one, but thrice or four times the size of it.

7. CERASTIUM.

13. *C. alpinum*.

Inhabits the mountains of Switzerland and the Pyrenees, and is probably general from the southern and temperate parts of Europe to the extreme north.

It is not noticed either by Pursh or Richardson as existing on the continent of America (where, however, *C. viscosum* reaches to the shore of the Arctic Sea: *Richardson*); but is found at Igloolik, Fern Island, Baffin's Bay, Melville Island, and Greenland.

8. STELLARIA.

14. *S. humifusa*.

This appears to be entirely a maritime plant. It is found in Nordland and Finmarck, according to Wahlenberg, who has however confounded it with the *S. crassifolia* of Ehrhart. I possess it from Varanska, near the North Cape, from Dr. Swartz. Dr. Hornemann has sent it to me from Greenland, where likewise Mr. Jameson found it; and it was met with during Captain Parry's second voyage at Neerlo-Nakto.

15. *S. cerastoides*.

A small and injured specimen, sufficient, however, to satisfy me that it is the real plant. A native of Lapland, Iceland, the alps of the south of Europe, as the Carinthian, those of Dauphiné and the Pyrenees. Nowhere noticed as inhabiting the continent of America.

16. *S. Ed-*

16. *S. Edwardsii*.

S. nitida. Hooker in Scoresby's *E. C. of West Greenland*.

Found, previously to its being discovered in West Greenland by Captain Scoresby, in some part of that country by Giesecké and Wormskiold. Dr. Richardson detected it on the shores of the Arctic Sea; and Captain Parry at Melville Island, Igloolik, &c.

9. ARENARIA.

17. *Arenaria rubella*.

A. quadrivalvis. Br.

First found by Wahlenberg, near the summit of the alps of Lyngen in the northern part of Nordland, at an elevation of 3000 Parisian feet above the level of the sea: afterwards in Melville Island. No other stations are at present known for it.

18. *A. ciliata*.

Found on mountains in the south as well as the north of Europe, as the Rhætian and Leontine, Pyrenean, Swiss and Carpathian alps. Likewise in Norway and Lapland; but nowhere on the continent of America.

19. *A. peploides*.

Inhabits the sea-shore of the temperate and northern parts of Europe: not extending probably further south than Bordeaux. Common in Germany, Britain, Iceland, Sweden, Norway, Lapland, Siberia (*Pallas*); the coast of Labrador, the sea-shore of America and Hudson's Bay (*Richardson*). Our arctic voyagers, however, do not appear to have met with it. Wahlenberg mentions that this plant ascends along the sandy banks of the river Jana as far as Seida, above three miles (Swedish ones I presume) distant from the sea.

Dr. Horne-

Dr. Hornemann had previously transmitted it to me from Greenland.

SAXIFRAGÆÆ.

10. SAXIFRAGA.

20. *S. oppositifolia*.

This is found upon mountains throughout Europe ; on the Pyrenees, in Switzerland, Britain, Lapland, Siberia, Iceland and Spitzbergen. In Newfoundland and Labrador. On the shores of the Arctic Sea, &c.

21. *S. Hirculus*.

Of this beautiful plant the specimens rarely exceed two inches in height. Inhabits Piedmont and the Jura, where it is alpine ; Germany and England but rarely. More frequent in the north of Europe, as in Sweden, Lapland and Siberia. Not in the Flora of North America. Found on the shores of the Arctic Sea by Dr. Richardson : on Melville Island ; abundant at Igloolik and other places visited by Captain Parry in the second expedition under his command : Baffin's Bay.

22. *S. flagellaris*.

This most remarkable plant was first discovered, according to Mr. Don, at Cape Newenham, on the north-west coast of America, by Mr. Nelson, during Captain Cook's third voyage ; and his specimens still exist in the Banksian Herbarium. Mr. Don further observes, that Pursh, who named the plant *setigera* after those individuals, is wrong in stating the flower to be small and white, which is indeed quite at variance with the true character, for the blossoms are large and yellow. Dr. Adams found it in the Caucasian Alps ; and both in Baffin's

fin's Bay and in Melville Island this species is tolerably abundant; and so familiar was its appearance to the sailors of those expeditions, that they gave it the very appropriate name of *Spider Plant*.

Neither did Dr. Richardson, nor Captain Parry in his second voyage, meet with this species. In Greenland it seems to have been found plentifully by Captain Sabine, although no voyagers had previously brought it from that country.

Mr. Don is surely mistaken in referring to this plant the *S. aspera* of Bieberstein's *Flora Taur. Caucas. v. i. p. 314*. The *S. flagellaris*, according to Mr. Brown, is described by Bieberstein in the third volume of that work, which I do not myself at present possess.

23. *S. rivularis*.

Inhabits the alps, principally of the north of Europe. Scotland is perhaps its most southern latitude, and there it is very rare. Found in Siberia, Lapland and Norway. In Labrador (*Pursh*); Igloolik and adjacent islands (*Captain Parry*); also in Melville Island and Baffin's Bay, if Mr. Brown's *S. hyperborea* be the same plant, or a variety of it.

24. *S. cæspitosa*.

Var. surculis nullis, foliis plerumque trifidis glanduloso-ciliatis, caule uni-trifloro, calyce nigro-pubescente glanduloso.

S. uniflora. Br. in Parry's 1st Voy. App. p. cclxxiv.

This is exactly the same variety as I have described in the Botanical Appendix to Parry's second Voyage, as found at Igloolik. I know of no figure which accords so well with this as the Norwegian *S. cæspitosa* (*Gunner's Flora Norveg. t. 7. f. 4.*).

Whether

Whether the same variety has been discovered in other countries I know not. A smaller and more densely-tufted state of the plant is likewise found in Greenland, but does not exist in this collection. A variety, with more or less elongated surculi, occurs in various parts of Europe in alpine regions.

25. *S. foliolosa*. Br.

Found in Lapland, according to Linnæus, who has described it as a variety of *S. stellaris*, with which I fear indeed that it must be constantly re-united. In Melville Island (*Captain Parry*); and, during the second expedition of that commander, it was found by Mr. Edwards.

There are only two specimens in Captain Sabine's collection; but he likewise detected it in Spitzbergen.

The true *S. stellaris* is also found in Greenland; on the west coast according to Mr. Greville. It is indigenous to Labrador and Canada, according to Pursh; although Dr. Richardson did not meet with it in Arctic America.

26. *S. nivalis*.

Principally confined to the high mountains of the north of Europe; Scotland being probably its most southern *habitat*. It grows in Lapland, Norway, Iceland, Labrador and Canada (*Pursh*); shores of the Arctic Sea (*Richardson*); and abundantly on the adjacent islands; in Spitzbergen (*Martins*).

27. *S. cernua*.

La Peyrouse mentions this as inhabiting the Pyrenees; and upon the authority of Schleicher's Herbarium it is given as a native of the Swiss alps. It is rare on the mountains of Scotland; and exists in Pallas's collection from Siberia. In Norway, Lapland and Iceland it is found; also in Spitzbergen,

Baffin's Bay, Melville Island, Igloolik, &c. Mr. Scoresby gathered it on the east coast of West Greenland; and Dr. Richardson on the shores of the Arctic Sea.

ROSACEÆ.

11. DRYAS.

28. *D.* — ?

As there is only a fructified scape of this plant, I am unable to say whether it belonged to *D. octopetala* or to *D. integrifolia*.

12. POTENTILLA.

29. *P. nivea*.

α. foliis supèr villosiusculis viridibus, subtus niveo-tomentosis. *Br.*

β. foliis utrinque villosiusculis, paginis concoloribus. *Br.*

This species is found as far south in Europe as the alps of Tyrol, Dauphiny and Switzerland. Gmelin gives it as an inhabitant of Siberia; and it is a native of Norway and Lapland. Colmaster found it in Labrador; Richardson on the shores of the Arctic Sea; Jameson on the west coast of Greenland (for I presume that it is the *P. Jamesoniana* of my friend Mr. Greville); Captain Parry in Melville Island: and it was also discovered in several of the places visited during that navigator's second voyage.

ONAGRARIÆ.

13. EPILOBIUM.

30. *E. latifolium*.

A beautiful species, confined entirely to high northern latitudes, Siberia and Kamschatka (*Gmelin*); Norway, Iceland, Labrador

Labrador and the north-west coast of America (*Pursh*); shores of the Arctic Sea. Found previously on the east coast of Greenland by Scoresby. Lyon Inlet, &c. (*Captain Parry*).

COMPOSITÆ.

14. LEONTODON.

31. *L. palustre*.

α . floribus luteis.

β . floribus purpurascens.

Common as this plant appears to be in the arctic regions, it is by no means peculiar to them, but is extended over various parts of Europe; as Carniola, Caucasus, Hungary, France, Bohemia, Germany and Great Britain. In the wooded country of North America, lat. 54° N. to the shores of the Icy Sea. Probably, too, it is the species mentioned by Mr. Brown, but not described, as differing from *L. Taraxacum*, and inhabiting wet shady woods. Baffin's Bay? Melville Island, Duckett Cove, *Captain Parry*.

The variety β . above mentioned has its flowers strikingly tinged with purple; and the lesser scales of its involucre more reflexed than in α .

14. ARNICA.

32. *A. angustifolia*. *Vahl. in Fl. Dan. v. ix. t. 1524.*

A. montana β . *Linn., Wahl., Br.*

A northern plant; native of Sweden, Lapland and Greenland, in which latter country it was first found by Giesecké near the colonies of Osnenak and Godhaon.

Mr. Brown does not consider this as specifically distinct from *A. montana* α ., *Linn.*; a plant which is found in the south as well as in the north of Europe and America, and of which

Mr. Brown further considers the *A. plantaginifolia* and *A. fulgens* to be varieties.

Mr. Scoresby's Greenland specimen exactly agrees with this, and with what I have also seen from Melville Island.

16. ERIGERON.

33. *E. uniflorum*.

I am quite unable to distinguish this from the *alpinum* of authors. Both may be considered as inhabiting the southern alps, as those of Switzerland, Pyrenees, the Jura, Carniola, Dalmatia and Saltzberg; and more frequently still those of the north of Europe. In Scotland it occurs on a few of the highest mountains. In Lapland it appears common, as it is also on the low grounds in Iceland. Colmaster discovered it in Labrador. I have a specimen gathered by Mr. Goldie on a river bank near Quebec. Shores of the Arctic Sea (*Richardson*). It does not appear in the Arctic Flora of Captain Ross's or Captain Parry's first Voyages. But it was discovered by the latter commander in Repulse Bay.

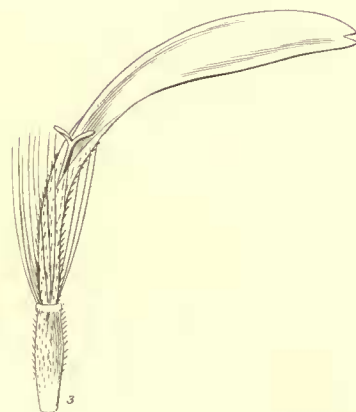
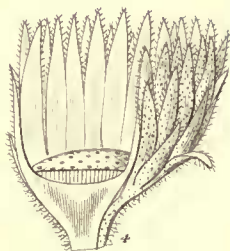
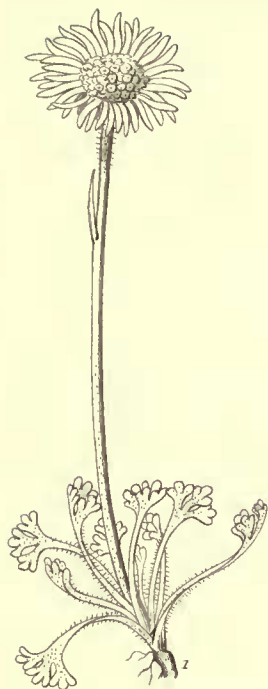
34. *E. compositum*, subacaule, foliis radicalibus longe petiolatis triplicato-tripartitis, laciniis linearibus divaricatis, caulinis linearibus plerumque indivisis, caule superne nudo unifloro.

TAB. XIII.

E. compositum. *Pursh Fl. of N. Amer. v. ii. p. 535.*

Cineraria Lewisii. *Rich. in Franklin's Journ. App. p. 748.*

Radix ut videtur parva, perennis, pauce fibrosa. *Caulis* nullus. *Folia* radicalia, longe petiolata, profunde tripartita, laciniis cuneiformibus trifidis, segmentis subovatis obtusis, pilis brevibus obsita. *Petioli* lineares ciliati, basi dilatati subvaginati. *Scapi* tri-quinque pollicares pilosiusculi, teres, nudi, vel foliolo solitario lanceolato integro instructi.



W. J. Hooker del.

Erigeron compositum.

J. Curtis sculp.

structi. *Flos* solitarius, terminalis, magnitudine *Bellidis perennis* vel paulo majore. *Involucrum* hemisphæricum e squamis vel laciniis lineari-lanceolatis viridi-fuscum; interioribus longitudine disci æqualibus; exterioribus minoribus et non raro recurvis; omnibus pilosis. *Flosculi disci* hermaphroditi numerosi, flavi, tubulosi, apice quinquefidi. *Antheræ* flavæ. *Stylus* antheris vix longior. *Stigma* bifidum: radii albi ligulati (demum fide Purshii rubicundi), basi tubulosi, pubescentes; ligula lineari-lanceolata glabra apice bifida. *Pericarpia* vel *Achenia* immatura oblonga, pilosa, hispida. *Pappus* sessilis, pilososcaber. *Receptaculum* planiusculum, punctatum, nudum.

A very singular plant, of which several specimens are in this collection, and which has been nowhere found besides, but on the banks of the Kooskoosky by Lewis, according to Pursh; and by Dr. Richardson in his expedition between Point Lake and the Arctic Sea.

The first appearance of this plant resembles so entirely that of an *Erigeron*, that I had no hesitation, from that circumstance alone, in referring it to this genus; and indeed, had its leaves been lanceolate and simple, I should have passed it over as a variety of *E. uniflorum*. My friend Dr. Richardson, however, has removed it to the genus *Cineraria*; though, upon a minute examination of its characters, I can find no circumstance in them to vary from *Erigeron*.

CAMPANULACEÆ.

17. CAMPANULA.

35. *C. uniflora*.

A northern plant, found in Lapland, only, of the continent of Europe. Rottboel has already given it as an inhabitant of Greenland;

Greenland; Dr. Richardson, of the shores of the Arctic Sea. It was found likewise in Melville Island and in Five Hawser Bay by Captain Parry.

VACCINEÆ.

18. VACCINIUM.

36. *V. uliginosum*.

A small-leaved variety, with the foliage entirely of a reddish hue; from the circumstance, perhaps, of its being gathered in autumn.

This species is a native of marshy and generally alpine grounds in various parts of Europe, Asia and North America; as France, Switzerland, Piedmont, Germany, Britain, Lapland, Kamschatka, about Lake Baikal and other parts of Siberia, and Iceland: in various parts of North America, to the shores of the Arctic Sea, and on the islands adjacent, as well as in Greenland.

ERICINEÆ.

19. RHODODENDRON.

37. *R. lapponicum*.

This charming plant may also be considered as exclusively arctic, the alps of Dahuria only being an exception. It seems otherwise confined to Lapland, Norway (but rare), the shores of the Arctic Sea and Greenland.—Only one specimen of it exists in the present collection.

20. ANDROMEDA.

38. *A. tetragona*.

Inhabiting only high northern latitudes. Found exclusively in Lapland, Spitzbergen, Labrador and Canada, the north-west

west coast of America, Baffin's Bay, the shores of Arctic America, Melville Island, Barrow-river, and Greenland.

POLEMONIACEÆ.

21. POLEMONIUM.

39. *P. cæruleum*.

Var. nana.

This singular variety does not exceed three inches in height: and the leaves rarely attain the length of two; the pinnæ are placed very close; but the corymb of flowers is most lovely, bright purple, nearly as large in diameter as the whole plant itself is tall, each blossom being three quarters of an inch in breadth. It is common to various parts of Europe, the temperate as well as the northern districts. It is found in Switzerland, about Basle on the Rhine, and on the Jura: in Germany and in England, where it does not affect very alpine situations. In Asia it reaches as high north as Kamschatka; in Siberia it grows about Lake Baikal; and Pennant states it to be a native of Nootka Sound. What Wahlenberg says of the Lapland state of this plant may be applied to the present individuals, although it does not afford any reason to infer that it is of the same diminutive size: "*longe speciosior mihi visa est quam in hortis nostris, corollis margine saturatiore cæruleis superbiens.*"

SCROPHULARINÆ.

22. PEDICULARIS.

40. *P. hirsuta*.

An arctic species, first discovered in Lapland by Linnæus. It exists also in Siberia, Spitzbergen, shores of the Arctic Sea,
in

in America, Baffin's Bay (it does not appear in the Melville Island Flora); Igloolik, &c.

PLUMBAGINEÆ.

23. STATICE.

41. *S. Armeria.*

This is perhaps the most extensively diffused plant of any in the collection. It grows both upon the sea-beach and on most of the high mountains which intervene between the shores of the Mediterranean and the utmost limit of arctic vegetation. Nor is it wholly confined to alpine spots and the vicinity of the sea; I have gathered a variety of it in grassy pastures in the environs of Paris: but though abundant in that particular *habitat*, I believe its occurrence in such situations to be very rare. In America we know, upon the authority of Pursh, that it extends from Pennsylvania to Virginia, keeping along the shores; and Dr. Richardson found it on the sea-coast of Arctic America.

POLYGONEÆ.

24. OXYRIA.

42. *O. reniformis.*

A well-known inhabitant of all the arctic regions, where it grows plentifully upon a level with the sea. In the south of Europe it affects only the most alpine situations, as the Pyrenees, in Auvergne, Switzerland, &c.

In America, besides being a native of Labrador and the most northern parts of that continent with the adjacent islands, we are lately informed by Dr. Torrey in his "Description of some new or rare Plants from the Rocky Mountains," that it grows upon James's Peak, one of the highest of that range, at
an

an elevation of 10,000 feet above the level of the ocean, near the limit of perpetual snow. The author however observes, that the species found there differs somewhat from ours, in having the flowers uniformly diandrous and the leaves not emarginate.

25. POLYGONUM.

43. *P. viviparum*.

This, like the last plant, is of common occurrence in the north of Europe, of Asia and America, particularly the arctic districts. In the alps of the south of Europe it also appears, but always growing at a great elevation above the level of the sea.

Besides being common in Arctic America, it is found in Labrador and Canada ; and my friend Mr. Boott has gathered it upon the summit of the White Mountains.

26. KÖNIGIA.

44. *K. Islandica*.

Found in Iceland (as its specific name implies) ; also in the Faroe Islands and Greenland ; and, as far as my knowledge goes, no where else.

AMENTACEÆ.

27. SALIX.

45. *S. arctica*. Br.

First discovered in Baffin's Bay, during Captain Ross's voyage ; afterwards in Greenland, Melville Island, and Igloodlik ; thus well deserving of the appellation which Mr. Brown has applied to it.

CL. II. MONOCOTYLEDONES.

JUNCI.

28. LUZULA.

46. *L. hyperborea*. Br. in Parry's 1st Voy. App. p. cclxxxiii.

If this be really a distinct species, it is, as far as I at present am aware, confined in its places of growth to Spitzbergen, Melville Island, Duke of York's Bay, Duckett Cove, Southampton Inlet, and Greenland. But in the present collection there are some individuals which I can by no means distinguish from *L. arcuata*, except in their having a greater number of flowers in each capitulum or spikelet.

CYPERACEÆ.

29. CAREX.

47. *C. fuliginosa*.

Found on the summit of the Carinthian Alps in Arctic America (*Richardson*); Duke of York's Bay, &c. (*Captain Parry's 2d Voyage*); and in Melville Island, if *C. misandra* be the same, which I have however not seen, but the description of which agrees with this species in many points.

30. ERIOPHORUM.

48. *E. capitatum*.

Inhabits the Pyrenees, the alps of Switzerland, Piedmont, Germany, Scotland (very rare), Lapland, Iceland and Melville Island, as well as Greenland. It was gathered by Mr. Edwards during Captain Parry's 2d voyage, but no particular station is given. It is not noticed by Pursh or Richardson.

49. *E. an-*

49. *E. angustifolium*.

Frequent in the temperate and warmer parts of Europe (where, indeed, it is not peculiar to the alpine districts), as well as in the northern and arctic regions; Siberia (*Gmelin*); frequent, too, in mountain meadows generally in North America, in the woody country from latitude 54° to 64° north; on the shores of the Arctic Sea (*Richardson*), and adjacent islands.

GRAMINEÆ.

31. ALOPECURUS.

50. *A. alpinus*.

This species was first detected in Scotland, upon Loch-nagare, a high mountain in Aberdeenshire, by Robert Brown, Esq., in 1794: afterwards found in Greenland by Giesecke, who named it *A. antarcticus* in Brewster's *Cyclopædia*, according to Brown; while Hornemann called it *A. ovatus* in *Flora Danica*. It has been discovered likewise in Melville Island, Baffin's Bay, shores of the Arctic Sea, America (*Richardson*); and in Igloodik, &c. (*Captain Parry*).

32. POA.

51. *P. angustata*. Br. in *Parry's 1st Voy. App. p. cclxxxvii*.

Hitherto this grass had only been found in Melville Island and at Igloodik.

52. *P. arctica*. Br. in *Parry's 1st Voy. App. p. cclxxxviii*.

Inhabits Baffin's Bay, Melville Island, Igloodik, and the east coast of West Greenland.

53. *P. laxa*.

α. *panicula angustata gracili, spiculis paucioribus*.

P. laxa. Hænke *Fl. Sudet.* p. 118. Host *Gram. Austr.*
v. iii. p. 10. t. 15.

P. flexuosa. Sm. in *Engl. Bot.* t. 1123.

β . *panicula latiuscula compacta, rigidior.*

The var. α so perfectly agrees with the figure in Host's *Gramina Austriaca*, that I have no hesitation in considering it to be really that plant. Of the β I am more doubtful. Its panicle is much broader; the spikelets more numerous and more compact; their pedicels shorter and less slender; and the whole is of a more purple colour. The general form and structure of the spikelets are the same.

The more common state of this species is found in the alps of Switzerland, Germany and Scotland; also in the sub-alpine districts of Lapland.

33. FESTUCA.

54. *F. ovina.*

Var. corollis valde pilosis.

Only one, and that a very injured, specimen of this grass is in the collection. The calyx is glabrous or only slightly ciliated at the margin; the florets remarkably hairy, more so than is represented in the *Fest. hirsuta* of Host, or the *F. rubra* of *Engl. Botany*. The leaves are wanting.

Festuca ovina is common throughout Europe, and at various elevations. Pursh has it not in his *Flora of North America*, nor Elliott in his recent account of the plants of the "middle and northern sections" of the United States: but Dr. Richardson found it plentifully, and it has been gathered by the Arctic voyagers.

34. DESCHAMPSIA.

55. *D. brevifolia*. Br. in Parry's 1st Voy. App. p. ccxci.

Found hitherto only in Melville Island, and during Captain Parry's 2d voyage. This comes very near to the *Aira lævigata* of our country.

35. TRISETUM.

56. *T. subspicatum*. Palisot Agrostogr. p. 88.

A native of the Pyrenees, the alps of Switzerland and Piedmont; Iceland and Lapland, Melville Island, and Duckett Cove. In America Dr. Richardson found it in the woody country from between lat. 54° and 64° N.

CL. III. ACOTYLEDONES.

FILICES.

36. ASPIDIUM.

57. *A. fragile*.

It inhabits alpine countries, probably throughout Europe, but especially its northern parts; as Siberia, Lapland, &c. as far as the North Cape. Dr. Richardson met with it in the woody country of North America between lat. 54° and 64°; and it was seen by the naturalists of Captain Parry's second expedition.

The *A. tenue* of Pursh and Michaux seems to be scarcely different; and is found in clefts of rocks from Canada to Virginia.

MUSCI.

MUSCI.

37. POLYTRICHUM.

58. *P. septentrionale*.

Found on the highest summits of the alps of the south and north of Europe; Melville Island; south shore of the Strait of the Fury and Hecla.

38. APLODON.

59. *A. Wormskioldii*. Br. in Parry's 1st Voy. App. p. 299.

Inhabits Greenland, Melville Island, and Igloolik.

LICHENES.

39. LECANORA.

60. *L. elegans*.

A native of maritime rocks throughout Europe, but most plentiful in the northern countries, as Iceland and Lapland. Shores of the Arctic Sea, America.

40. USNEA.

61. *U. sphacelata*. Br. in Parry's 1st Voy. App. p. 307.

A beautiful plant, and very nearly allied to a species of the same genus which I have lately received from New South Shetland.

Found hitherto only in Spitzbergen and Melville Island.

SPITZ-

SPITZBERGEN PLANTS.

CL. I. DICOTYLEDONES.

RANUNCULACEÆ.

1. *Ranunculus nivalis* : supra in *Pl. of Greenland*.

The specimens of this are remarkably fine, and larger than I have seen from any other country.

2. *R. pygmæus*. *Wahl. Fl. Lapp. p. 157.*

An inhabitant of Lapland, Norway, Finmarck, Labrador (according to *Pursh*), and the shores of the Arctic Sea, North America (*Richardson*).

PAPAVERACEÆ.

3. *Papaver nudicaule*, supra in *Pl. of Greenland*.

CRUCIFERÆ.

4. *Draba alpina*, supra in *Pl. of Greenland*.

5. *D. micropetala*. *Hook. in Parry's 2d Voy. App.*

A single specimen only of this exists, exactly corresponding to what I have described in the work above referred to.

6. *D. hirta*, var. 5. *Hook. in Parry's 2d Voy. App.*

This, which was found in several places during Captain Parry's 2d voyage, differs but little from my 4th variety of the same species, mentioned in the account of Captain Sabine's Greenland Plants.

7. *Cochlearia Danica*. Linn. Sp. Pl. p. 903.

This has the lower leaves almost deltoid, the upper ones mostly petiolated, and is altogether of the common size and the usual habit of *C. Danica*. There are no perfectly formed seed-vessels.

8. *Cardamine bellidifolia*, supra in Pl. of Greenland.

CARYOPHYLLÆ.

9. *Lychnis apetala*, supra in Pl. of Greenland.

This is the common and more glabrous state of the plant.

10. *Cerastium alpinum*, supra in Pl. of Greenland.
Arenaria rubella, supra in Pl. of Greenland.

SAXIFRAGÆ.

11. *Saxifraga oppositifolia*, supra in Pl. of Greenland.
12. *S. rivularis*, supra in Pl. of Greenland.
13. *S. cæspitosa*, supra in Pl. of Greenland.

Of this species there are two varieties, the one similar to what I have noticed above in the account of Greenland plants, only being rather less glandular; the other, that dwarf and densely-tufted variety, which has gone under the name of *S. groenlandica*.

14. *S. cernua*, supra in Pl. of Greenland.
15. *S. nivalis*, supra in Pl. of Greenland.
16. *S. foliolosa*, supra in Pl. of Greenland.

ROSA-

ROSACEÆ.

17. *Dryas octopetala*. Linn. Sp. Pl. p. 717.

Var. minor, foliis parvis angustis profunde crenatis.

Found on mountains in the south of Europe, as the Pyrenees, the alps of Switzerland, Savoy, Austria, Britain, Iceland, Lapland, Siberia, Greenland, &c. ; high mountains in the north-western part of Canada (*Pursh*); and the woody country of North America, between latitude 54° and 64° north (*Richardson*).

In Britain this plant prefers a calcareous or limestone soil. I possess specimens with the lower half of the leaves crenate, while the upper are entire; thus appearing to unite the two species *octopetala* (or *chamædryfolia*, as *Pursh* calls it, the number of petals being variable,) with the *integrifolia* (*tenella* of *Pursh*).

18. *Potentilla nivea* β, supra in *Pl. of Greenland*.

POLYGONEÆ.

19. *Polygonum viviparum*, supra in *Pl. of Greenland*.

20. *Oxyria reniformis*, supra in *Pl. of Greenland*.

AMENTACEÆ.

21. *Salix polaris*. Wahl. Fl. Lapp. p. 261. t. 13. f. 1.

This appears to have been first discovered in Spitzbergen by Martins; afterwards by Wahlenberg and Liljeblad in Lapland. These, I believe, are the only stations for this interesting plant.

The shape of the leaves, the size and habit of the species, bring it very near to *S. herbacea* ; but the downy capsules well distinguish it.

CL. II. MONOCOTYLEDONES.

22. *Luzula hyperborea*, supra in *Pl. of Greenland*.

Poa laxa, supra in *Pl. of Greenland*.

This has the common appearance of *P. laxa* ; some of the specimens are however viviparous.

CL. III. ACOTYLEDONES.

23. *Polytrichum alpinum*.

A common species on high mountains in all parts of Europe, particularly in the north.

24. *Bryum cæspititium*.

Found in almost all parts of the world.

PLANTS FROM THE NORTH CAPE.

CL. I. DICOTYLEDONES.

RANUNCULUS.

1. *Ranunculus acris*.

Common throughout Europe, Tauria, Siberia, Iceland. From New York to Canada ; but not yet found in Arctic America.

2. *R. au-*

2. *R. auricomus*, supra in *Pl. of Greenland*.

Trollius europæus.

Confined, as it appears, entirely to Europe; from the extreme north to the south: not found however in Iceland.

3. *Caltha palustris*, var. *radicans*. *Hooker Fl. Scot. P. I. p. 176*.
C. radicans. *Engl. Bot. t. 2175*.

Assuredly but a variety of *C. palustris*, becoming dwarf and creeping, with some alterations in the form of the leaves in cold and alpine situations. It inhabits the whole of Europe, from Greece to the North Cape; Iceland. America, from Pennsylvania to about 60° north. *Caltha arctica* of Brown is a plant very nearly allied to this, and is found in Melville Island.

CARYOPHYLLÆ.

4. *Silene acaulis*, supra in *Pl. of Greenland*.

CRASSULACÆ.

5. *Rhodiola rosea*.

Frequent in Europe, inhabiting the alps solely in the southern part, as the Pyrenees, the mountains of Dauphiny and Switzerland, &c. In Britain it grows on the mountains; and in the northern extremity, as Orkney and Shetland, abundantly on the rocks of the sea-coast. It is found in similar situations in the arctic parts of the continent of Europe and in Iceland. Not a native, I believe, of the continent of America: but it has been brought by Captain Scoresby from Greenland.

CRUCIFERÆ.

6. *Draba incana*, supra in *Pl. of Greenland*.

Cochlearia anglica?

Specimens not in fruit. The species appears to be confined to the more northern districts of Europe; England, perhaps, being its most southern range.

SAXIFRAGÆ.

7. *Saxifraga cæspitosa*, supra in *Pl. of Greenland*.

The calyx and pedicels are less glandular than in the Greenland and other arctic specimens.

VIOLEÆ.

8. *Viola biflora*.

Common on the Pyrenees and the alps of Switzerland, Jura, and those of Germany; Siberia, Lapland and Norway. Not found, as far as I know, in England, Iceland or America.

ROSACEÆ.

9. *Potentilla verna*.

Found throughout the whole of Europe, Iceland, and the north of Asia. This is certainly the species figured in *English Botany*; and the one which I noticed under that name in Scoresby's East Coast of West Greenland (as far as my recollection serves me, for I have no specimens in my possession) is the same plant; although my learned and valued friend Mr. Brown considers that individual to belong to the variety β of *P. nivea*.

10. *Al-*

10. *Alchemilla vulgaris*.

Peculiar to Europe ; in the south of which, as Tauria, it is common in sub-alpine spots ; in the north, as Iceland, it grows plentifully on the low grounds.

11. *Rubus Chamæmorus*.

Found only in the north of Europe and America ; not reaching in the former country further to the southward than the mountains of Bohemia and Silesia. In America it grows on the highest hills of New England and in Canada. Dr. Richardson met with it in the neighbourhood of the Arctic Sea ; and I have gathered it in Iceland.

CAPRIFOLIACEÆ.

12. *Cornus suecica*.

This plant again is a native only of the north of Europe and of Asia ; and in Kamschatka. In Britain it is only found in Scotland and the highest parts of England : in Germany it appears to be confined to the Duchy of Oldenberg, Ammerland, Jeiver and Heiligoland.

COMPOSITÆ.

13. *Leontodon palustre* ? supra in *Pl. of Greenland*.

The specimens of this plant appear to hold exactly an intermediate rank between those of *Leontodon palustre* and *L. Taraxacum*.

14. *Gnaphalium dioicum*.

Common throughout Europe, especially in the south, as Tauria, affecting the mountains. It has been brought from Siberia

beria and Nootka Sound. Dr. Richardson found it in North America, in the wooded country, from latitude 54° to 64°.

ERICINEÆ.

15. *Azalea procumbens*.

Inhabits Europe, from the Pyrenees and Swiss Alps to the North Cape, Siberia and Iceland. The north-west coast of America (*Mr. Menzies*); White Mountains of New England (*Mr. Boott*); Arctic America (*Dr. Richardson*); Upper Savage Island (*Captain Parry*).

16. *Arbutus Uva Ursi*.

Inhabits the whole of Europe; Siberia, Kamtschatka and Iceland. Common in America, as the pine-barrens of New Jersey, and in mountainous and rocky situations of Canada and New England, and the plains of the Mississippi. In Arctic America (*Dr. Richardson*).

17. *Andromeda polifolia*.

Inhabits the south of Europe, rarely. Near Rouen and La Campine in France. Carniola (*Scopoli*). More common in the north of Europe; plentiful in some parts of England and Scotland. Not seen in Iceland. The American plant described by Pursh appears to be a distinct species, with much longer and narrower leaves.

18. *Menziesia cærulea*.

A northern plant, occurring very rarely in Scotland. More plentiful in Norway, Lapland, Siberia, and Kamtschatka. In Greenland (*Crantz*).

SCROPHU-